

EXHIBIT A

(Modification Log)

```

1  ****
2  /* Filename: domino_manager   Project: Cop
3  ****
4  /*
5  /* (C) Copyright Intel Corporation,
6  /* Licensed material -- Program property of Intel Corporation
7  /* All Rights Reserved
8  /*
9  /* This program is the property of Intel Corporation and is furnished
10 /* pursuant to a written license agreement. It may not be used, reproduced,
11 /* or disclosed to others except in accordance with the terms and conditions
12 /* of that agreement.
13 /*
14 ****
15 /*
16 /* Original Author: Hans J. Greub   Email:
17 /*
18 /* Functional description:
19 /*
20 /* This script extracts domino circuits and simulates the dominos and
21 /* inverting gates igates in stages using dominosim for simulating the
22 /* the dominos for chargesharing, residual (propagated noise from the
23 /* input to the output), and the injected crosstalk voltage at the output,
24 /* and using go_nm to characterize UGNMH vs Vout for custom or zgc cells
25 /* connected to dominos and then propagates the worst case
26 /* voltage drop on the domino output through the inverting gates to get
27 /* the input residual for the next domino stage.
28 /* All propagated residuals are captured in the file:
29 /* xcap/domino/data/<fub>.residual
30 /* A margin report for all domino outputs is written to the file:
31 /* xcap/report/<fub>.domino_finalreport
32 /*
33 ****
34 /*
35 /*
36 ****
37 # Implementation Notes:
38 ****
39 #
40 # Data Structures
41 #
42 # The Domino Output Noise Info is stored in the hash:
43 # $DomOutput{$pathmill_node_name}=@domino_output_record;
44 # each entry contains pointer to a domino_output_record with the following format:
45 #
46 @domino_output_record=($Reff,$Rline,$Ctot,$Cx,$Residual,$Peak,$Fub_Pin,$Supply_Noise,$ChargeSh
47 aring,$Average_Attacker_Slope,$assumed_fixed_value);
48 # The Domino Input Noise Info is stored in the hash:
49 # $DomInput{$pathmill_node_name}=@domino_input_record;
50 # Each entry points to a record which contains:
51 #
52 @domino_input_record=($Reff,$Rline,$Ctot,$Cx,$Residual,$Source_of_Residual,$Peak,$Fub_Pin,$Suppl
53 y_Noise,$Average_Attacker_Slope);
54 # changed keys from ipath to pathmill notation

```

```

1  # - added the mapping hashes for simulation
2  # %map_out2igate{$node}="igate${id}$fub"
3  # %map_out2domino{$node}="dom${id}$fub"
4  # these hashes map an output node to a domino or igate cell name
5  # added the following hashes
6  #
7  @receiver_record=($domino_driven_input_pin,$source_config,$sinvelm_output,$sinvelm_name,$sinvelm_ty
8  pe);
9  # The hash %map_igate_out2igate_record maps igate outputs to igate records
10 # @igate_record=($sinvelm_type,$source_config,\@domino_driven_input_list,
11 # \@domino_driven_input_pin_list,$sinvelm_name);
12
13 # obsolete $map_igate_receiver{$domino_driven_input}=\@receiver_records;
14 # $map_igate_out2cell_type{$igate_output}=$cell_type;
15 # The residual on igate outputs must be propagated thru
16 # passgates. The hash %short_igate2dynin with key $igate_output_node
17 # points to an array (list) of dynin nodes to which the residual
18 # needs to be propagated.
19 # $short_igate2dynin{$igate_node}=\@dynin_node_list;
20 # push(@{$short_igate2dynin{$igate_node}}, $dynin_node);
21 #
22 # Modification Log
23 # █████ - added fub_boundary condition check for fub outputs
24 # █████ - added fub_boundary statements for fub input
25 # █████ - changed no receivers found on domino outputs to
26 # █████ warning messages to handle nocons better
27 # █████ - moving databases instead of deleting them!
28 # █████ - fixed bug in domino_stageN.pN cell list generation
29 # █████ - changed noise propagation from DYNOUT based to igate cell
30 # █████ based to conform to order in sim_sequence
31 # █████ - added -use_previous_results feature
32 # █████ - added archiving and output of $fub.residuals
33 # █████ - added database migration for -start_fresh option
34 # █████ - added $ENV{CSEJOBNOEMAIL}="TRUE";
35 # █████ - removed path to /usr/home1/hgreub version of
36 # █████ igate_identify
37 # █████ - removed path checking for domino_extract because
38 # █████ it hangs in CTM
39 # █████ - changed tcsh path since /bin/tcsh does not work in
40 # █████ CTM
41 # █████ - fixed bug in migrate_dp which cause domino_manager
42 # █████ to quit if -start_fresh option is used and no db
43 # █████ datafiles exist
44 # █████ - fixed 'nbq -Pcs' instead $command_prefix bug in
45 # █████ domino simulate section
46 # █████ - added -f flag to tcsh to fix some problems with
47 # █████ setup in CTM
48 # █████ - added support for custom cells that the user wants
49 # █████ to treat like standard cells
50 # █████ if a cell custom_cell that is listed in the inv_element_fub.dat
51 # █████ file and thus was declared to be treated like a standard cell
52 # █████ in the xcap/domino/igate_no_extract_fub.dat file, domino_manager
53 # █████ looks for a command file "custom_cell.cmd" and if it exists
54 # █████ will simulate this cell once and read in the results

```

```

1 # █████ - removed -x from tesh -f -x
2 # █████ - changed pathmill2plus to not add fubname prefix for fub pins
3 # █████ - changed read_transgate_domino_sim, looks like header in the
4 # file changed
5 # █████ - fixed bug in UGNMH computation, lowest UGNMH instead of highest
6 # UGNMH with lowest NT was kept
7 # █████ - fixed bug in residual propagation through passgates, the new
8 # residual value was copied in without checking whether the existing
9 # value is (worst case)
10 # - fixed argument processing so that domino_manager -<anything> gives
11 # usage message
12 # █████ - added handling of case if 2*($vout-2*$vout2) is zero
13 # in compute_propagated_residual()
14 # █████ - added check for TIM version 2.8.b1
15 # █████ - added message to re-run xcap_mutex and xcap_change_psn
16 # █████ - added handling of domino/igate not reported condition in
17 # sim seq file
18 # █████ - fixed migrate_db() for igate
19 # █████ - fixed worst noise level reported in domino_finalreport
20 # █████ - added an enhancement to deal with multiple tri-state drivers
21 # connected to an igate output node (works for stdcells only)
22 # █████ - fixed domino residual propagation bug, fub.residuals was correct
23 # but %DomInput data was still bad
24 # █████ - increased min chunk from 12 to 24 because of netbatch overflow.
25 # █████ - changed initial values in DomOutput to make sure dominos that
26 # have not been simulated will fail
27 # █████ - added sanity checks to read_sim_seq files
28 # █████ - fixed residual propagation through passgates
29 # █████ - added archiving of siminfo file used for domino simulation

```

```

30
31
32 $VERSION="2.0";
33 $last_modified="█████";
34 .
35 .
36 .
37

```

This gives a time date of the LAST modification of some other "underlying" scripts that domino_manager calls to do needed functions.

```

40 █████>ls -l
41 total 124
42 -rwxr-xr-x 1 █████ users 2151 █████ build_for_xcap
43 -rwxr-xr-x 1 █████ users 13009 █████ domino2ipath
44 -rwxr-xr-x 1 █████ users 10042 █████ domino_extract
45 -rwxr-xr-x 1 █████ users 7072 █████ ggate_extract
46 -rwxr-xr-x 1 █████ users 7710 █████ igate_extract

```

EXHIBIT B

(Parameter Extraction Code)

```

1  From the code "domino_extract":
2
3  #!/bin/csh
4
5  # Created [REDACTED] by Mark Nardin
6  # For use in extracting domino circuit netlists for simulation
7
8  set DOM_EXTRACT_EXE = $0
9
10 if ( ($#argv == 0) | ($1 == "-help") ) then
11     echo " "
12     echo "This MUST be run from a setup window where plus can be run. "
13     echo " "
14     echo " "
15     awk '/^#BEGINhelp_message/ {\
16         getline\
17         while ( $1 != "#ENDhelp_message") {\
18             print\
19             getline\
20         } }' $DOM_EXTRACT_EXE
21     exit 0
22 endif
23
24 setenv WARD $WORK_AREA_ROOT_DIR
25 setenv FUB $1$2
26 setenv fub $1
27
28 if !( -e $WARD/plus/frz/xcap_$fub.frz ) then
29     echo " "
30     echo " Can not find the required freeze file:"
31     echo "   $WARD/plus/frz/xcap_$fub.frz
32     echo " "
33     echo " Run the script: build_for_xcap "
34     echo " "
35     exit 0
36 endif
37
38
39 # Record the current directory
40 set CUR_DIR = `pwd`
41
42 # Make the master command file that needs to be executed in plus
43 #
44 rm -f $WARD/plus/cmd/domcall_tmp_$FUB.cmd
45 #
46 # Making the start-up sequence for PLUS to run
47 #
48 echo " Running plus and restarting the freeze file from xcap_<fub>.frz"
49 echo "restart xcap_$fub" > $WARD/plus/cmd/domcall_tmp_$FUB.cmd
50 #
51 # Making the series of commands that need to be run for each of the
52 # individual domino nodes
53 #
54 awk '/^/ {\

```

```

1  print "put n \"$1\" domoutput_erc := TRUE"; \
2  print "@\"$WARD\"/plus/cmd/domselect_plus_\"$FUB\".cmd"; \
3  print "@\"$WARD\"/plus/cmd/select_temp_\"$FUB\".cmd"; \
4  print "system date"; \
5  print "simulate -nojob -ignore -selected -sdp dom\"$2\"ext\"$fub\""; \
6  print "system process_ext dom\"$2\"ext\"$fub\".sdp -create_template"; \
7  print "system source \"$WARD\"/plus/cmd/make_delete_file_\"$FUB\".tmp"; \
8  print "@\"$WARD\"/plus/cmd/delete_sources_\"$FUB\".tmp" } '\
9  $WARD/plus/erc/domout_nodes_$FUB.dat >> $WARD/plus/cmd/domcall_tmp_$FUB.cmd
10
11  # Make the plus command file that actually extracts the iPath
12  # command file statements
13  #

```

EXHIBIT C

(Output Log)


```

1 ptdl: [REDACTED]n>ls -l
2 total 528
3 -rwxr-xr-x 1 [REDACTED] cop 1139 [REDACTED] ## [REDACTED] -10:38:37#.ptdis91.gz
4 -rwxr-xr-x 1 [REDACTED] cop 473 [REDACTED] ## [REDACTED] -12:48:42#.ptdis12.gz
5 -rw-r--r-- 1 [REDACTED] cop 265 [REDACTED] faaddc.domino_extract_audit.gz
6 -rw-r--r-- 1 [REDACTED] cop 5749 [REDACTED] faaddc.domino_finalreport.complete.gz
7 -rw-r--r-- 1 [REDACTED] cop 5759 [REDACTED] faaddc.domino_finalreport.gz
8 -rw-r--r-- 1 [REDACTED] cop 5749 [REDACTED] faaddc.domino_finalreport.previous.gz
9 -rw-r--r-- 1 [REDACTED] cop 3415 [REDACTED] faaddc.domino_simulate.audit.gz
10 -rw-r--r-- 1 [REDACTED] cop 495820 [REDACTED] faaddc.xcap_finalreport.gz
11
12 ptdl:mnardin>gzless faaddc.domino_finalreport.gz
13 *****
14 * DOMINO FLOW XCAP REPORT *
15 *****
16
17 domino_manager version 2.0, last modified on [REDACTED]
18
19 Command Line : domino_manager faaddc -simulate -parallel 8 -netbatch iss_short
20 TimeStamp : [REDACTED]
21
22 USER : [REDACTED]
23 WORK_AREA_ROOT_DIR: /prj/cop/work_root/feu/[REDACTED]/faaddc
24 Note: The worst domino input residual reported is the worst residual
25 propagated to the inputs from a previous domino stage, the worst case
26 domino input noise is the worst total noise (power_supply_noise+residual+xtalk)
27 on any domino input (not necessarily the input that had the worst residual)
28
29 Report for all DYNOUT Nodes sorted based on margin
30
31 2.???V DYNOUT faaddd/i34/pp[71] (dom194faaddc)
32 -W- no receiver found, verify NOCON!
33 Voltage Drop: 0.130V (ChgSh(0.010V)+Residual(0.040V)+XTalk(0.055V)+PSN(0.025V))
34 worst domino input noise : 0.111V on node: faaddd/i34/i13/i1/pp2nn[3]
35 worst domino input residual: 0.029V from dom245faaddc
36
37 2.???V DYNOUT faaddd/i34/gg[71] (dom144faaddc)
38 -W- no receiver found, verify NOCON!
39 Voltage Drop: 0.199V (ChgSh(0.001V)+Residual(0.032V)+XTalk(0.141V)+PSN(0.025V))
40 worst domino input noise : 0.120V on node: faaddd/i34/i13/i1/gg2nn[1]
41 worst domino input residual: 0.029V from dom245faaddc
42
43 *** The Noise on the following Domino Output Nodes is below the Receiver UGNMH ***
44
45 +0.032V DYNOUT faaddd/i34/i31/gout[5] (dom104faaddc)
46 Voltage Drop: 0.186V (ChgSh(0.001V)+Residual(0.085V)+XTalk(0.075V)+PSN(0.025V))
47 worst receiver UGNMH : 1.582V (NT:0.218V) from
48 zgca2nox800040x4000040x1024040x4000040
49 worst domino input noise : 0.197V on node: faaddd/i34/i31/gg2nn[1]
50 worst domino input residual: 0.073V from dom55faaddc
51
52 +0.037V DYNOUT faaddd/i34/gg[29] (dom82faaddc)
53 Voltage Drop: 0.208V (ChgSh(0.000V)+Residual(0.031V)+XTalk(0.152V)+PSN(0.025V))
54 worst receiver UGNMH : 1.555V (NT:0.245V) from
55 zgca2nox1000040x4000040x1024040x4000040
56 worst domino input noise : 0.120V on node: faaddd/i34/i6/i1/gg2nn[1]

```

```

1      worst domino input residual: 0.028V from dom137faaddc
2
3      +0.048V DYNOUT faadd/i34/gg[17]      (dom211faaddc)
4      Voltage Drop: 0.197V (ChgSh(0.000V)+Residual(0.031V)+XTalk(0.141V)+PSN(0.025V))
5      worst receiver UGNMH      : 1.555V (NT:0.245V) from
6      zgca2nox1000040x4000040x1024040x4000040
7      worst domino input noise   : 0.120V on node: faadd/i34/i4/i1/gg2nn[1]
8      worst domino input residual: 0.028V from dom72faaddc
9
10     +0.050V DYNOUT faadd/i34/pp[11]      (dom55faaddc)
11     Voltage Drop: 0.261V (ChgSh(0.010V)+Residual(0.031V)+XTalk(0.195V)+PSN(0.025V))
12     worst receiver UGNMH      : 1.489V (NT:0.311V) from
13     zgca2nox1400040x3600040x1024040x3600040
14     worst domino input noise   : 0.111V on node: faadd/i34/i3/i1/pp2nn[3]
15     worst domino input residual: 0.028V from dom168faaddc
16
17     +0.051V DYNOUT faadd/i34/pp[23]      (dom189faaddc)
18     Voltage Drop: 0.194V (ChgSh(0.010V)+Residual(0.031V)+XTalk(0.128V)+PSN(0.025V))
19     worst receiver UGNMH      : 1.555V (NT:0.245V) from
20     zgca2nox1000040x4000040x1024040x4000040
21     worst domino input noise   : 0.111V on node: faadd/i34/i5/i1/pp2nn[3]
22     worst domino input residual: 0.028V from dom233faaddc
23
24     +0.055V DYNOUT faadd/i34/pp[53]      (dom126faaddc)
25     Voltage Drop: 0.242V (ChgSh(0.010V)+Residual(0.033V)+XTalk(0.174V)+PSN(0.025V))
26     worst receiver UGNMH      : 1.503V (NT:0.297V) from zi0bna02he
27     worst domino input noise   : 0.111V on node: faadd/i34/i10/i1/pp2nn[3]
28     worst domino input residual: 0.029V from dom24faaddc
29
30
31
32
33
34     *****
35     * SUMMARY of DOMINO REPORT *
36     *****
37
38     249 dominos were found in FUB: faaddc
39
40     0 dominos were not mapped or extracted
41     2 dominos had no receivers (NOCONS?)
42     0 dominos were assumed to be fixed for noise propagation
43     0 domino circuits had negative noise margins

```

EXHIBIT D

(Simulation Sequence File)

```

1  sim_seq_faaddc.dat:
2  #<node_type>      <node_name>
3  -----
4
5  #simulation_count   1.000
6  domino_node        faadd{p62faadd}/i34{p62faadyn72add}/i10{p62faadnew2zi0madd_add6c}%g[0]
7  domino_node        faadd{p62faadd}/i34{p62faadyn72add}/i10{p62faadnew2zi0madd_add6c}%p[0]
8  domino_node        faadd{p62faadd}/i34{p62faadyn72add}/i10{p62faadnew2zi0madd_add6c}%g[1]
9  domino_node        faadd{p62faadd}/i34{p62faadyn72add}/i10{p62faadnew2zi0madd_add6c}%p[1]
10 ..
11 ..
12 domino_node        faadd{p62faadd}/i34{p62faadyn72add}/i9{p62faadnew2zi0madd_add6c}%p[5]
13 #simulation_count   2.000
14 igate_node          faadd{p62faadd}/i34{p62faadyn72add}%qnn[48]
15 igate_node          faadd{p62faadd}/i34{p62faadyn72add}%qnn[49]
16 igate_node          faadd{p62faadd}/i34{p62faadyn72add}%qnn[50]
17 igate_node          faadd{p62faadd}/i34{p62faadyn72add}%qnn[51]
18 igate_node
19 faadd{p62faadd}/i34{p62faadyn72add}/i10{p62faadnew2zi0madd_add6c}/i0[1]{p62faaddczi0madd_pg
20 genc}%net100
21 igate_node
22 faadd{p62faadd}/i34{p62faadyn72add}/i10{p62faadnew2zi0madd_add6c}/i0[2]{p62faaddczi0madd_pg
23 genc}%net100
24 igate_node
25 faadd{p62faadd}/i34{p62faadyn72add}/i10{p62faadnew2zi0madd_add6c}/i0[3]{p62faaddczi0madd_pg
26 genc}%net100
27 igate_node
28 faadd{p62faadd}/i34{p62faadyn72add}/i10{p62faadnew2zi0madd_add6c}/i0[4]{p62faaddczi0madd_pg
29 genc}%net100
30 igate_node
31 faadd{p62faadd}/i34{p62faadyn72add}/i9{p62faadnew2zi0madd_add6c}/i1{p62fazi0madd_cla6c}%pp
32 2nn[1]
33 #simulation_count   3.000
34 domino_node        faadd{p62faadd}/i34{p62faadyn72add}%gg[50]
35 domino_node        faadd{p62faadd}/i34{p62faadyn72add}%gg[51]
36 domino_node        faadd{p62faadd}/i34{p62faadyn72add}%gg[52]
37 domino_node        faadd{p62faadd}/i34{p62faadyn72add}%gg[53]
38 ..
39 ..
40 domino_node        faadd{p62faadd}/i34{p62faadyn72add}%pp[50]
41 domino_node        faadd{p62faadd}/i34{p62faadyn72add}%gg[47]
42 domino_node        faadd{p62faadd}/i34{p62faadyn72add}%pp[47]
43 #simulation_count   4.000
44 igate_node          faadd{p62faadd}/i34{p62faadyn72add}/i16[3]{zi0madd_sume}%n0
45 igate_node          faadd{p62faadd}/i34{p62faadyn72add}/i16[3]{zi0madd_sume}%ggnn
46 igate_node          faadd{p62faadd}/i34{p62faadyn72add}/i31{p62faa2ndcla}%pp2nn[10]
47 ..
48 ..
49 igate_node          faadd{p62faadd}/i34{p62faadyn72add}/i31{p62faa2ndcla}%pp2nn[7]
50 #simulation_count   5.000
51 domino_node        faadd{p62faadd}/i34{p62faadyn72add}/i31{p62faa2ndcla}%pp[10]
52 domino_node        faadd{p62faadd}/i34{p62faadyn72add}/i31{p62faa2ndcla}%gout[5]
53 domino_node        faadd{p62faadd}/i34{p62faadyn72add}/i31{p62faa2ndcla}%gp[10]
54 ..

```

```

1  ..
2  domino_node      faadd{p62faadd}/i34{p62faadyn72add}/i31{p62faa2ndcla}%pp[7]
3  domino_node      faadd{p62faadd}/i34{p62faadyn72add}/i31{p62faa2ndcla}%gp[3]
4  #simulation_count 6.000
5  igate_node        faadd{p62faadd}/i34{p62faadyn72add}%coutnn[23]
6  igate_node        faadd{p62faadd}/i34{p62faadyn72add}%coutnn[29]
7  igate_node        faadd{p62faadd}/i34{p62faadyn72add}%coutnn[35]
8  igate_node        faadd{p62faadd}/i34{p62faadyn72add}%coutnn[41]
9  igate_node        faadd{p62faadd}/i34{p62faadyn72add}%coutnn[47]
10  igate_node        faadd{p62faadd}/i34{p62faadyn72add}%coutnn[53]
11  igate_node        faadd{p62faadd}/i34{p62faadyn72add}%coutnn[59]
12  igate_node        faadd{p62faadd}/i34{p62faadyn72add}%coutnn[65]

```

EXHIBIT E

(Simulation Time Stamp Log)

```

1  #███-14:10:39#.ptdis86:
2  | Starting time : Fri ███ 14:10:39 ███
3  | Command      : xcap/domino/data/nbq_domino_stage1.p1
4  | Finishing time : Fri ███ 14:41:59 ███
5  ##███-14:10:40#.ptdis77:
6  | Starting time : Fri ███ 14:10:40 ███
7  | Command      : xcap/domino/data/nbq_domino_stage1.p2
8  | Finishing time : Fri ███ 14:43:12 ███
9  ##███-14:10:41#.ptdis97:
10 | Starting time : Fri ███ 14:10:41 ███
11 | Command      : xcap/domino/data/nbq_domino_stage1.p3
12 | Finishing time : Fri ███ 14:42:03 ███
13 ##███-14:10:41#.ptdis75:
14 | Starting time : Fri ███ 14:10:41 ███
15 | Command      : xcap/domino/data/nbq_domino_stage1.p4
16 | Finishing time : Fri ███ 14:59:50 ███
17 ##███-14:10:42#.ptdis116:
18 | Starting time : Fri ███ 14:10:42 ███
19 | Command      : xcap/domino/data/nbq_domino_stage1.p5
20 | Finishing time : Fri ███ 14:58:43 ███
21 ##███-14:10:42#.ptdis108:
22 | Starting time : Fri ███ 14:10:42 ███
23 | Command      : xcap/domino/data/nbq_domino_stage1.p6
24 | Finishing time : Fri ███ 15:00:26 ███
25 ##███-14:10:43#.ptdis14:
26 | Starting time : Fri ███ 14:10:43 ███
27 | Command      : xcap/domino/data/nbq_domino_stage1.p7
28 | Finishing time : Fri ███ 14:52:31 ███
29 ##███-15:00:56#.ptdis78:
30 | Starting time : Fri ███ 15:00:56 ███
31 | Command      : xcap/domino/data/nbq_domino_stage3.p1
32 | Finishing time : Fri ███ 15:48:19 ███
33 ##███-15:00:57#.ptdis99:
34 | Starting time : Fri ███ 15:00:57 ███
35 | Command      : xcap/domino/data/nbq_domino_stage3.p2
36 | Finishing time : Fri ███ 15:47:51 ███
37 ##███-15:00:57#.ptdis109:
38 | Starting time : Fri ███ 15:00:57 ███
39 | Command      : xcap/domino/data/nbq_domino_stage3.p3
40 | Finishing time : Fri ███ 15:47:53 ███
41 ##███-15:00:58#.ptdis89:
42 | Starting time : Fri ███ 15:00:58 ███
43 | Command      : xcap/domino/data/nbq_domino_stage3.p4
44 | Finishing time : Fri ███ 15:47:51 ███
45 ##███-15:00:58#.ptdis87:
46 | Starting time : Fri ███ 15:00:58 ███
47 | Command      : xcap/domino/data/nbq_domino_stage3.p5
48 | Finishing time : Fri ███ 15:39:01 ███
49 ##███-15:49:02#.ptdis97:
50 | Starting time : Fri ███ 15:49:02 ███
51 | Command      : xcap/domino/data/nbq_igate_stage4.p1
52 | Finishing time : Fri ███ 16:00:56 ███
53 ##███-16:01:05#.ptdis86:
54 | Starting time : Fri ███ 16:01:05 ███

```

1 | Command : xcap/domino/data/nbq_domino_stage5.pl
2 | Finishing time : Fri [REDACTED] 16:14:30 [REDACTED]
3 ##[REDACTED]-16:15:07#.ptdis86:
4 | Starting time : Fri [REDACTED] 16:15:07 [REDACTED]
5 | Command : xcap/domino/data/nbq_igate_stage6.pl
6 | Finishing time : Fri [REDACTED] 16:21:12 [REDACTED]